# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION WATER MANAGEMENT

APS ID No. 318950 Auth ID No. 675675

For Department Use Only

#### **FACT SHEET**

NAME OF APPLICANT Reynoldsville Sewage Authority PROJECT LOCATION Jefferson County PA0028207

This application is for a renewal of an NPDES permit, for an existing discharge of treated domestic sewage and oil and gas brine wastewater (except from shale oil extraction activities) from a POTW. This is a minor discharge.

The name and mailing address are:

The name and site address are:

Reynoldsville Sewage Authority
400 North Fifth Street
Reynoldsville, PA 15851

Reynoldsville, PA 15851

Reynoldsville, PA 15851

The responsible official is: Robert Crosby, Manager Tel.: 814-653-8245

The EPA Waiver is in effect, however the Department has agreed to forward a copy of the draft permit for EPA to review how we are permitting the receipt of oil and gas brine wastewater.

In 2008 the facility was deemed organically overloaded. A CO&A was executed on 4/11/11 that requires upgrades of to the headworks and sludge handling facilities at the treatment plant. An update to the Borough's Act 537 Plan is currently under review by the Department.

## RECOMMENDATION AND ACTION

Approve- Issue by Region	Refuse	Signature	Date
Х		DRAFT	
		REVIEWING ENGINEER FINAL	
Х			
		PERMITS SECTION CHIEF	
Х			
		REGIONAL PROGRAM MANAGER	

#### **PERMIT CONDITIONS:**

1. OTHER REQUIREMENTS: One: Stormwater into sewers

Two: Right of way

Three: Department revocation of permit

Four: Solids handling

2. SPECIAL: 1. CSO Condition

2. TRC Minimization

eDMR Reporting Requirement
 Receipt of Residual Waste

5 Limit on quantity of wastewater associated with natural gas drilling.

6. Requirement for a Radiation Protection Action Plan

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## Permit Requirements:

The proposed discharge limitations are based on: 40 CFR 133, except for NH<sub>3</sub>-N and fecal coliform (winter period) which are water quality based. Other, non-sewage parameters are added because the facility receives brine wastewater. Those included parameters are from the Department's High TDS Control Strategy.

Outfall No. 001 River Mile Index: 17.7 Stream Code: 48527

Lat: 41° 05' 41" Long: 78° 53' 48"

Which Receives Waste From: treated domestic sewage and oil and gas brine wastewater.

The proposed discharge limits are based upon a design flow of 0.8 MGD.

	Loadings (lb/day)		Concentrations (mg/l)			Monitoring	
Parameters	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Instant Maximum	Measurement Frequency	Sample Type
Flow (MGD) CBOD <sub>5</sub>	Report	Report				Continuous	Measured
(05/01 - 10/31)	133	200	20	30	40	1/week	24-hr. comp.
(11/01 - 04/30)	167	267	25	40	50	1/week	24-hr. comp.
TSS	200	300	30	45	60	1/week	24-hr. comp.
Ammonia Nitrogen							•
(05/01 - 10/31)	57		8.5		17	1/week	24-hr. comp.
Fecal Coliform*							•
(05/01 - 09/30)			200/100ml		1,000/100 ml	1/week	Grab
(10/01 - 04/30)			2,000/100 ml		10,000/100 ml	1/week	Grab
Total Residual Chlorine			0.5		1.6	Daily	Grab
Total Dissolved Solids	10,976	33,201+	Report	Report+		1/week	24-Hr Comp.
Osmotic Pressure (mOs/kg)			Report			2/month	24-Hr Comp.
Total Barium	Report		Report			2/month	24-Hr Comp.
Total Strontium	Report		Report			2/month	24-Hr Comp.
Chloride	Report		Report			2/month	24-Hr Comp.
Sulfate	Report		Report			2/month	24-Hr Comp.
Bromide	Report		Report			2/month	24-Hr Comp.
Gross Alpha (pCi/L)			Report			2/month	24-Hr Comp.
Radium 226/228, Total (pCi/L)			Report			2/month	24-Hr Comp.
Uranium (µg/l)			Report			2/month	24-Hr Comp.
pH	Within limits of 6.0 to 9.0 standard units at all times.				l times.	Daily	Grab

<sup>\* -</sup> Average Monthly limits expressed as a geometric mean

Samples taken at the following location: Outfall 001 - after disinfection.

<sup>+ -</sup> daily maximum value

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#### Combined Sewer Overflow Outfalls

Outfall No.	Location	Stream Code	Latitude	Longitude
002 A&B	5 <sup>th</sup> Street Lift Station CSO's	48527	41° 05' 37"	78° 53' 28"
003	3 <sup>rd</sup> Street CSO	48707	41° 05' 49"	78° 53' 33"
004	West Side Lift Station CSO	48527	41° 05' 46"	78° 53' 34"
005	Broadway & Central CSO	48527	41° 06' 10"	78° 53' 32"
007	Worth Street CSO	48684	41° 05' 19"	78° 53' 10"
008	14 <sup>th</sup> Street CSO	48684	41° 05' 09"	78° 52' 38"

The receiving waters are Sandy Lick Creek – Outfalls 001, 002, 004 & 005, Pitchpine Run – Outfall 003 & Soldier Run – Outfalls 007 & 008. The receiving streams are in State Water Plan 17-C and are classified for the following uses: trout stocking fishes (Sandy Lick Creek) and cold water fishes (Pitchpine Run and Soldier Run), aquatic life, water supply and recreation. The nearest downstream potable water supply is the Hawthorn Water Company intake located on Redbank Creek, approximately 30 miles below the point of discharge.

Future compliance status with draft permit limits: The permittee should be able to meet these limits based on historic DMR data and the existing facility design.

A Water Quality Management permit is not required at this time.

Existing Treatment Process/Facilities and WQM permit #3384402: Grit Removal, Primary Clarifier and Imhoff Tank, (8) RBC's, (2) Final Clarifier and (2) Chlorine Contact Tanks. Sludge handling accomplished with Imhoff Tank digestion and Sludge Drying Beds.

A more detailed review of previous Department of Health permits #9303-S and #A-991 shows they contain no stated effluent limits that need to be superseded in this NPDES permit.

WQM permit #3372402 can be cancelled since the treatment facilities that were retained, when the plant was upgraded/expanded under WQM permit #3384402, are included in this more recent permit.

## LTCP Projects Completed:

- Upgrade of two (2) pump stations
- Replaced the force main into the STP
- Separated approx. 10, 640 L.F. of combined sewers
- Rehab and upgrade of approx. 3,100 L.F. of sewers via pipe bursting
- Replaced all eight (8) RBC units at the STP. The last 2 were replaced in late 2010.

### Annual CSO Report percent capture:

2009: 98.28% 2010: 90.36% Reynoldsville Sewage Authority Reynoldsville Borough, Jefferson County Application ID No. PA0028207 Fact Sheet Page 4

Due to this facility receiving oil and gas brine wastewater the Region contemplated the need to categorize it a 'major' discharger. However, when the rating sheet was filled out, assuming a worst case scenario that this was an oil refinery, the number of points assigned still did not exceed the '80' score necessary to deem this a major discharger.